

PSC STAFF REVIEW AND RECOMMENDATIONS ON GENERATION BID PROPOSALS

DOCKET NO. 06-241

**PREPARED FOR
THE DELAWARE PUBLIC SERVICE COMMISSION
MAY 8, 2007**



Conectiv Energy Supply, Inc.



NRG Energy, Inc.

Chronology of Events

- August 1, 2006 – Delmarva files RFP
- August 8, 2006 – Commission establishes Docket 06-241
- August 18, 2006 – Staff holds public workshop
- September 18, 2006 – Independent Consultant issues draft RFP report
- October 12, 2006 – Independent Consultant issues final RFP Report
- October 17, 2006 – Commission hears oral discussion and approves RFP changes
- November 1, 2006 – Delmarva issues approved RFP for generation
- November 15, 2006 – Delmarva hosts pre-bid workshop
- November 22, 2006 – Four companies submit Notices of Intent to Bid
- December 21/22, 2006 – Bluewater, Conectiv & NRG submit bids
- February 21, 2007 – Independent Consultant and Delmarva file Evaluation Reports
- February 27, 2007 – Commission hears review; sets schedule for further review
- March 6, 7 & 12, 2007 – Public Comment Sessions
- April 4, 2007 – Independent Consultant issues Interim IRP Report
- April 10, 11 & 12, 2007 – Public Comment Sessions
- April 27, 2007 – Staff posts PowerWorld Reliability Report
- May 1, 2007 – Independent Consultant issues Evaluation Report Addendum
- May 3, 2007 – Staff issues its review and recommendations
- May 8, 2007 - ?



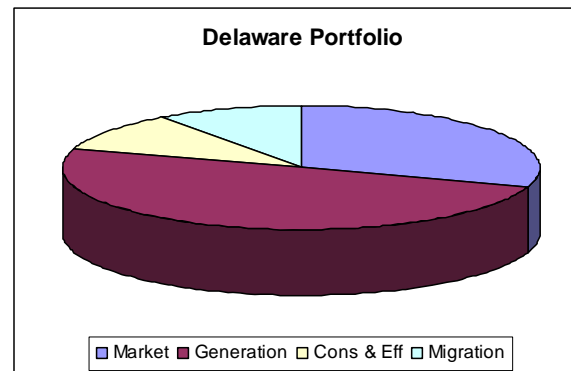
What are the important factors for consideration?

- SOS load requirements
- Supply planning methodology
- Reliance on energy markets
- Project evaluations
- Public policy
- Financial risks
- System reliability

What are the SOS load requirements?

- Load on 2013 @ 50% average
 - 50% over and 50% under
 - 2005 50% Load - 490M 343MW
 - 30% reserved for market
 - 70% for integrated supply
- Load Growth
 - PJM Average – 1.6% 555MW 389MW
 - PJM DPL Zone – 1.9% 570MW 399MW
 - Energy Task Force – 2.0+
 - Staff – 2.1% 575MW 402MW
- Unknown migration

70%



How can Delaware best plan for supply?

- EURCSA directs exploration of all reasonable strategies
- EURCSA directs value to a variety of characteristics
- Synapse Energy Economics, Inc. advocates a portfolio approach
- NERC finds long-term supply requires a broad and balanced portfolio
- NRRI identified portfolio analysis as a recommended approach to supply planning
- Cabinet Committee on Energy suggests looking beyond projected energy market conditions

Portfolio planning is a recommended approach

Should Delaware rely on energy markets?

- PJM markets produced 59-100+% increases in 2006
- New RPM has raised capacity prices from 3% to approximately 10% of typical bill
- 2007 Capacity prices are estimated to have increased 1,227%
- Chronic congestion causes Eastern LMP prices to run \$5.00 - \$10.00 more
- Market power on peninsula is moderately concentrated
- Staff report found continued regulation of generation would have raised 2006 prices by 35-40%, not 59-100%

How were the projects evaluated?

- Bid evaluations based on weighting of EURCSA criteria:
 - Cost effectiveness of the project
 - Producing energy price stability
 - Reductions in environmental impact
 - Benefits of adopting new/emerging technology
 - Siting feasibility
 - Terms & conditions of sale
- Valuing innovative baseload technology, long-term environmental benefit, existing fuel and transmission structure, fuel diversity, support or improve reliability and use existing brownfield or industrial sites.
- Result: Conectiv, Bluewater Wind, NRG Energy

What is an appropriate public policy?

- EURCSA provided direction
- EURCSA identified the items of value
- The public provided its thoughts and concerns identifying important issues
- Staff suggested a policy outcome
 - Delaware should take charge of its energy future in a manner that effectively manages energy risk and obtains the benefits of a diverse energy portfolio.

How do you manage financial risks?

- Long-term generation project risks
 - Out of market contracts
 - Purchase and sale of energy
 - Fuel purchases
 - Volume and migration
 - Environmental compliance costs
 - Construction risk
 - Credit risk
 - Technology risk
 - Supply diversity

Staff recommends close monitoring of risk factors and incorporation of probabilistic analysis in portfolio planning

How do the bids impact system reliability?

- Assumptions
 - MAPP Transmission delayed
 - Indian River #1 & 2 retire
- Results
 - Contingency overloads on various circuits
 - Baseload plant in Southern DE beneficial
 - Windfarm w/gas turbine back up in Southern DE beneficial, particularly as synchronous condenser
 - Windfarm alone has limited benefit
 - Hayroad gas turbine has little impact
- System reliability planning should be an integral part of portfolio analysis and risk assessment



What are the Commission's Options?

- Reject all bids as non-conforming
- Select one or more bids for PPA negotiations
- Defer decision to completion of IRP
- Suggest alternative legislation to address identified risks
- Move forward with a regulated generation approach

What does Staff Recommend?

- Delaware should take control of its energy future
 - Supply portfolio planning that:
 - Minimizes risk and
 - Maximizes benefit
- The Commission should ensure that Delmarva or a responsible third party actively plans and manages energy supply
- Delmarva should be directed to negotiate with Conectiv and Bluewater for a hybrid generation approach that meets Delaware needs
- The Commission should ensure independent oversight and review of any and all PPA negotiations